## IDAHO CONTENT STANDARDS GRADE 7 SCIENCE

#### **Standard 1: Nature of Science**

Goals:	Objective 1	Objective 2	Objective 3	Objective 4	Objective 5	Objective 6	Objective 7
Goal 1.1: Understand Systems, Order, and Organization	7.S.1.1.1 Define small systems as a part of a whole system. (633.01.a)	7.S.1.1.2 Determine how small systems contribute to the function of the whole. (633.01.a)	7.S.1.1.3 Identify the different structural levels of an organism (cells, tissues, organs, and organ systems). (633.01.b)				
Goal 1.2: Understand Concepts and Processes of Evidence, Models, and Explanations	7.S.1.2.1 Describe how observations and data are evidence on which to base scientific explanations and predictions. (633.02.a)	7.S.1.2.2 Use observations to make defendable inferences. (633.02.b)	7.S.1.2.3 Use models to explain or demonstrate a concept. (633.02.c)				
Goal 1.3: Understand Constancy, Change, and Measurement	7.S.1.3.1 Identify concepts of science that have been stable over time. (633.03.a)	7.S.1.3.2 Recognize changes that occur within systems. (633.03.b)	7.S.1.3.3 Make metric measurements using appropriate tools. (633.03.c)				
Goal 1.4: Understand the Theory that Evolution is a Process that Relates to the Gradual Changes in the Universe and of Equilibrium as a Physical State	Reference to objective 7.S.3.2.1						
Goal 1.5: Understand Concepts of Form and Function	No objectives at this grade level.						
Goal 1.6: Understand Scientific Inquiry and Develop Critical Thinking Skills	7.S.1.6.1 Identify controls and variables used in scientific investigations. (634.01.b)	7.S.1.6.2 Use appropriate tools and techniques to gather and display data. (634.01c)	7.S.1.6.3 Evaluate data in order to form conclusions. (634.01.d)	7.S.1.6.4 Use evidence and critical thinking to accept or reject a hypothesis. (634.01.e)	7.S.1.6.5 Evaluate alternative explanations or predictions. (634.01.f)	7.S.1.6.6 Communicate and defend scientific procedures and explanations. (634.01.g)	
Goal 1.7: Understand That Interpersonal Relationships Are Important in Scientific Endeavors	No objectives at this grade level.						
Goal 1.8: Understand Technical Communication	7.S.1.8.1 Read and evaluate technical instructions. (643.02.a)						

**Standard 2: Physical Science** No goals or objectives at this grade level.

#### **Standard 3: Biology**

Goals:	Objective 1	Objective 2	Objective 3	Objective 4	Objective 5	Objective 6	Objective 7
Goal 3.1: Understand the Theory of Biological Evolution	7.S.3.1.1 Describe how natural selection explains species change over time. (637.01.a)						
Goal 3.2: Understand the Relationship between Matter and Energy in Living Systems	7.S.3.2.1 Describe how energy stored in food is primarily derived from the sun through photosynthesis. (638.01.a)	7.S.3.2.2 Describe how the availability of resources (matter and energy) limits the distribution and abundance of organisms. (638.01.b)	7.S.3.2.3 Illustrate how atoms and molecules cycle among the living and nonliving components of the biosphere. (638.01.c)	7.S.3.2.4 Identify how energy flows through ecosystems in one direction, from photosynthetic organisms to herbivores, carnivore, and decomposers. (638.01.d)			
Goal 3.3: Understand the Cell is the Basis of Form and Function for All Living Things	7.S.3.3.1 Explain the relationships among specialized cells, tissues, organs, organ systems, and organisms. (636.01.a)	7.S.3.3.2 Identify the parts of specialized plant and animal cells. (636.01.b)	7.S.3.3.3 Identify the functions of cell structures. (636.01.b)	7.S.3.3.4 Describe cell functions that involve chemical reactions. (630.01.c)	7.S.3.3.5 Describe how dominant and recessive traits are inherited. (636.01.e)		

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**Standard 4: Earth and Space Systems** No goals or objectives at this grade level.

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### **Standard 5: Personal and Social Perspectives; Technology**

Goals:	Objective 1	Objective 2	Objective 3	Objective 4	Objective 5	Objective 6	Objective 7
Goal 5.1: Understand Common Environmental Quality Issues, Both Natural and Human Induced	No objectives at this grade level.						
Goal 5.2: Understand the Relationship between Science and Technology	7.S.5.2.1 Explain how science and technology are interrelated. (640.01.a)	7.S.5.2.2 Explain how science advances technology. (640.01.b)					
Goal 5.3: Understand the Importance of Natural Resources and the Need to Manage and Conserve Them	7.S.5.3.1 Identify alternative sources of energy. (641.03.a)						

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